

EROS: worldwide images

People around the world will share the fulfillment of a dream with Sioux Falls and area residents Tuesday as the permanent EROS facility north of the city becomes a reality.

Public dedication ceremonies are scheduled for 9:30 Tuesday morning, Aug. 7 with Secretary of the Interior, Rogers Morton, giving the dedicatory address at the EROS site.

Beginning at 9:30 Monday morning, Aug. 6 at the Holiday Inn Downtown, EROS officials will conduct a public seminar held for the purpose of briefing the layman on the EROS program and the projections for the future.

"We feel it is extremely important that people here understand what EROS is to the world, because they can be our greatest promoters of the project," said senior scientist, William Fischer.

In explaining the reason Sioux Falls was originally chosen as the EROS site, Fischer explained that in time past, margins of the world were determined by the ships that spanned the oceans.

"But with space and satellites we see a shift in this geography of knowledge and the mid-continent has the margin. Canada and Brazil made the decision to build their data centers in the middle of the continent too," he said.

EROS director John De Noyer pointed out that finding a central location was of primary importance.

"Our final choice was made because of the support Sioux Falls people gave us and the future support is likewise as important," DeNoyer said.

In further explaining the EROS program Fischer and De Noyer said, "The ERTZ experimental satellite is the first one looking back to earth.

The satellite orbits the earth every 18 days, except for a little region around each pole and pictures are dispatched to several points in North America. At other points in the world a tape recorder is used which makes a slight delay in the transmission of images.

The satellite uses two kinds of photographic equipment. The first and most frequently used is a multispectral scanner which looks at a spot on the earth and records the brightness of light in four different colors; green, red and just beyond what the human eye can see as red and get the intensity of light.



EROS Exhibits and Information Officer, Theresa Sousa, points to a lake in Texas on the first image sent back by the ERTZ sat-

ellite. The pictures will be one of 15 new EROS images displayed in the Holiday Inn Downtown.

The spot is moved across the ground for a distance of 115 miles, then the spacecraft moves forward an amount equal to the width of the line and scans the path again. A radio signal is then sent to a detailed television screen with 4,300 lines.

The second device is a camera with much higher resolution than a commercial camera. There are three on the spacecraft.

"We do not use this often and it is being saved in case the other device fails," Fischer said.

EROS is designed to provide color or black and white photographs of land areas throughout the world to anyone who has a need for the images; geologists, foresters, agriculturalists and even the South Dakota farmer.

Crop types can be determined in all areas of the world.

Fischer also pointed to the important area of mapping snow so that in lieu of floods and water supply, people may know what is there in order to preserve it or in the face of a flood disaster, to know what may be coming and if there is too much.

In the Mississippi flood area, for instance, images



William Fischer, EROS Senior Scientist

taken by the satellite prior to the flood and immediately after show the extent of the ground covered and flooded out.

Instead of the 500 aerial photographs it would take to cover the area, people are able to sit down and study one synoptic view of the entire area with no color variables.

It is also possible to monitor environmental changes and therefore provide an objective picture which in some instances may even be used as court evidence.

A large part of the program in the EROS facility will include training sessions to teach people to use the images which are available to them. Many of these sessions have already been held.

Active in the preparations for the three day agenda is Theresa Sousa, Exhibits and Information officer, EROS, who has been with the program and worked with Fischer since its beginning in September of 1966.

Responsible for all exhibit displays, Ms. Sousa has changed all of the EROS picture displays at the Downtown Holiday Inn. The new exhibit will include 10 40 by 40 inch prints from foreign countries in the International room. The five prints in the lobby will feature the first ERTZ launching area, an image of Sioux Falls, the first image that came back from the satellite on the Texas-Oklahoma border and a photograph of the new EROS Data Center.

"The exhibits vary according to the area and what we are trying to show," Ms. Sousa said.

"But we want to show what it is, how it operates, how the man on the street is benefited and how the data from the satellite can be put to the best use," she continued.

Ms. Sousa is particularly interested in how the space program relates to the common man.

"When someone says 'what good is it going to do me', I point out the things in our everyday life that have come as a result of space research," she said, enumerating such things as frozen and dehydrated foods, the transistor radio, and light weight clothing.

Following a welcome by Mayor M. E. Schirmer at the Monday briefing Fischer will discuss "The Experiment and the Promise of the Experiment." This will be followed by a panel discussion with high level representatives from the EROS Space companies who created the hard-

ware to "do the job!"

The afternoon program will be centered around results with a summary of uses in geology, agriculture, land use mapping and planning with special talks about what was learned in the Mississippi flood area and how the uses of the Apollo and ERTZ space data led to the discovery of mines.

There will also be a display with a half size replica of the ERTZ spacecraft, a large model of Sky Lab and other related equipment. Industrial displays may be viewed at the Holiday's Embassy Room on Sunday, Aug. 5 (today).

The EROS representatives emphasized the fact that people can come and go at will during the hours of the briefing. About 500 people are expected to attend.

There are 700 guests anticipated at a Monday evening cocktail party and dinner. These guests will be top level representatives from government and industry throughout the United States as well as several foreign countries.

The Tuesday dedication will be followed by a tour of the facility.



John DeNoyer, EROS Director